Lightening the Load

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One of the most powerful weapons available to the commander is speed. The unit that can consistently move and act faster than its enemy has a powerful advantage. The ability to plan, decide, execute, and assess faster than the enemy creates advantage that commanders can exploit... If speed is a weapon, so is Speed and time create tempo. Tempo is the rate of military action and has significance only in relation to that of the enemy... The commander must be able to generate and maintain a fast pace when the situation calls for it and to recover when it will not hurt... To be consistent, superiority in tempo must continue over time. It is not enough to move faster than the enemy only now and then. When the friendly force is not moving faster, the advantage and initiative passes to the enemy... The challenge is to be consistently faster than the enemy. 1

Tempo, a tactical tenant from Marine Corps doctrinal publication (MCDP) 1-0, is a powerful advantage which can make one unit sub come to the will of another unit.

However, the Marine Corps is passing the advantage and initiative to the enemy by mandating the amount of gear Marines are required to wear in Iraq and Afghanistan. The command determined personnel protective equipment (PPE) and mission critical gear must be reduced in weight because it degrades the unit's capabilities to maneuver and defeat the enemy, which ultimately degrades the Corps' abilities to accomplish the mission.

¹ Marine Corps Operations. Washington D.C., 2001

Today's Warfighter

Today's warfighter is more protected than ever, but this protection comes at a cost. The warfighter's equipment and protective gear makes him/her heavier and slower on foot. In Vietnam, a Marine's typical load weighed "75 pounds." The difference in weight of a combat loaded Marine in Vietnam to Operation Iraqi Freedom (OIF) or Operation Enduring Freedom (OEF) is an increase of 62 pounds. In 2009, a typical Marine's combat load is an average of "137 pounds worth of body armor and gear." MARADMIN 262/07 mandates everything a Marine is required to wear in either Iraq or Afghanistan:

Marines and sailors assigned to USMC and Joint Commands are required to wear outer tactical vest or modular tactical vest, lightweight helmet, full-spectrum battle equipment, military eye protection systems, enhanced small arms protective insert plates [ESAPI], side small arms protective insert [SAPI] plates, ballistic plate carrier, quad guard, flame resistant organizational gear and combat arms earplugs.⁴

Wearing all the PPE mentioned in the MARADMIN will provide protection for the Marine; however, the Marine will be ineffective because he or she will only move at shorter distances and at a slower pace by foot due to the weight.

² Captain P.J. Durham, "Just One More Thing" (Contemporary Issues, Expeditionary Warfare School), 2.

³ Captain Durham, "Just One More Thing," 2.

⁴ United States Marine Corps, MARADMIN 262/07, 2007 (CMC Washington DC)

If an average male Marine weighs 160 pounds, he will be carrying at least three-fourths of his body weight in PPE and equipment.

Decision Making

Mission, enemy, terrain, troops and fire support available, time, space, and logistics (METT-TSL) enables a Marine leader to develop an estimate of the situation.

After the Marine leader finishes his estimate, he is able to determine the requirements to accomplish the task:

- his mission
- the type and the size of the enemy he will be fighting
- the terrain and weather he will be operating
- the number of troops and fire support assets he will have available for the operation
- the amount of time he has to accomplish his mission
- the area that he must traverse to get to the objective
- the logistical support required before, during, and after the operation.

This estimate allows the leader to determine the exact gear and PPE requirements for any operation. However, in Iraq and Afghanistan field grade and company grade commanders are not the ones making the decisions regarding PPE and

gear, general level officers are making this decision. For instance, MARADMIN 262/07 also states who is authorized to raise or lower the level of PPE:

Marine component and/or functional component/joint task force (JTF) commanders will prescribe the wear of PPE for units conducting operations in their respective theater of operations. PPE requirements established by a functional component commander that are more inclusive than those set by the associated Marine component commander will be met by Marines/Sailors serving under the designated command. Subordinate commanders will have the authority to require their Marines/Sailors to wear additional levels of PPE based on their estimate of the situation. Subordinate commanders who determine that a lower level of PPE is appropriate must receive approval from their respective USMC and/or functional component/JTF commander prior to execution of any change.⁵

This MARADMIN limits subordinate commanders' ability to execute their estimate of the situation to properly and adequately prepare their Marines for any mission. In March 2006, the first marine expeditionary force (MEF) headquarters stated that every Marine must have side SAPI's. This requirement was an unpopular decision because the majority of the battalion had not worn them throughout this deployment. This decision denied the battalion commander to properly determine the appropriate level of protection for his battalion. Consequently, the Marines added six more pounds to their PPE, resulting in them

⁵ USMC, *MARADMIN 262/07*, 2007

becoming better targets for the enemy; they now moved even slower.

Subordinate commanders are selected command for specific reasons, much of which is due to their experiences, maturity, and decision making. General level officers who are removed from the battlefield need to have the confidence in their battalion commanders to make the appropriate decisions regarding PPE and gear; the same as they do for that battalion commander to accomplish the mission.

Mobility

General Conway stated in an interview with *The Military Observer*, that the Marine Corps needs to get back to its expeditionary mindset. He has further stated that he is:

Right now, we're serving very much in a second land army role in Iraq. We have got to shed in order to be able to meet those transportation means. Along the way, we give away protection for our Marines, and we've got to get that right and that's the terrible choice that we've got out there is how light is too light. 6

The Commandant is correct. The Marine Corps is too heavy

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⁶ Vago Muradian, posting to The Military Observer, May 28, 2008, http://themilitaryobserver.blogspot.com/2008/05/interview-with-genjames-conway.html

and must make tough choices regarding protection. This statement must include individual Marines, equipment, and the Marine Corps as a whole. The bottom line is Marines are too heavy when they go into combat. Marines are not able to maintain the tempo while attempting to neutralize insurgents. As a result, the Marines are being ambushed and caught by surprise because their enemy is able to move quickly throughout the area because they are not overloaded with gear and equipment.

In Afghanistan in 2004, two companies on separate patrols had Marines sustain heat related injuries due to all the gear and equipment they were carrying. As a result, the battalion commander ordered the entire battalion SAPI plate carriers. The battalion commander's rationale behind this was that he wanted his Marines to be able to chase and keep up with the insurgents in the mountains. As a result, the battalion was lighter and able to move faster in the mountains. The one stipulation he had on the plate carrier was that the Marines had to wear their plate carrier with SAPI plates over the outer tactical vest whenever traveling in a vehicle. The battalion commander did his estimate of the situation and

 $^{^7}$ A SAPI plate carrier is a vest that has a pouch to hold your SAPI plates in the front and rear with two side buckles and shoulder straps. The only protection the plate carrier offers is when your place your SAPI plates into the pouches.

realized that different types of missions required different types of gear. He had the autonomy to make these risky decisions and the risk was worth the gain. That was 2004, where as today the same battalion commander would have to ask permission to make the same decision. The reduction of PPE in some situations can afford Marines to be successful and accomplish the mission.

Medical Considerations

Heat

In the vignette previously discussed, one of the major factors for these companies' poor performance was the heat. These patrols occurred during the summer with temperatures exceeding 100 degrees Fahrenheit and high humidity. With the increase of weight in body armor and gear, heat injuries will become a significant medical problem.

This increase in weight places greater demand on the Marine, and in extreme conditions, dehydration and fatigue will be two physiological factors that will arise. Marines will sweat more with the increase of weight and be unable to replace their needed nutrients and electrolytes. This will cause heat cramps, heat exhaustion, or even heat stroke. Consequently, the inability to replace the needed

nutrients and electrolytes can then lead to fatigue, and fatigue will affect the Marine's decision making abilities. This increase of weight will affect the body's cooling capability. The increase of weight can be similar to body fat which, "Interferes with the heat regulatory mechanism [and] cause the individual to expend more energy to accomplish a given amount of work." This means that an individual, regardless of his physical conditioning, will be required to expend a lot more energy to compensate for the increased weight. The Marine Corps needs to consider how effective a Marine will be with the increase of weight in gear and PPE and prevent him or her from sustaining a heat injury.

Lower Extremity Injuries

The knee and ankle are mission critical for any

Marine. "Of all the moving parts in the body, few take as

much abuse as the knee. With the momentum of each step,

your knee joint absorbs three times your body weight.

Straighten up from a deep squat, and the pressure on the

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⁸ Naval Safety Center, Manual of Naval Preventative Medicine (NAVMED P-5010), http://www.safetycenter.navy.mil/OSH/ground/heatinjuryprev.htm.

joint can reach nine times your weight." Similarly, the ankle absorbs, "1.5 times your body weight with every step." Both the knee and ankle are very delicate areas of the body susceptible to injury.

However, the Marine Corps compounds the problem by requiring Marines to carry upwards of an additional "137 pounds of gear and PPE." Regardless of the amount of physical conditioning one may have, the knee and ankle will begin to deteriorate and eventually fail. This can become serious, especially if a Marine is desperately but cannot be there because he or she has an injury. Though knee injuries may not have occurred, if they do, these injuries will become a serious problem. Unless the Marine Corps develops lighter gear they could be a steady incline of knee and ankle injuries which will preclude Marines from deploying. The Marine Corps is a force in readiness and needs to ensure that it is not rendering its Marines useless because of a rise in knee and ankle injuries.

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 $^{^{9}}$ Janice M. Horowitz, "What the knees really need," *Time*, July 22, 2002,62.

¹⁰Kevin Collopy, Assessment and Treatment of ANKLE INJURIES, http://articles.directorym.net/Assessment_and_Treatment_of_ANKLE_INJURIES-a907047.html.

¹¹Captain P.J. Durham, "Just One More Thing" (Contempary Issues, Expeditionary Warfare School), 2.

Counterarguments

The War on Terror has seen the lowest number of casualties than any other war in American history. The biggest reasons are due to the amount of armored vehicles and body armor worn by American service members. This is the biggest argument why service men and women need to wear as much PPE as possible. This argument has merit; however, protecting every inch of a Marine's body makes him slower and presents a larger target to the enemy.

PPE needs to be scalable depending upon the situation. If a Marine has to walk, mobility and speed are paramount to his security. If the Marine is going to be traveling in a vehicle and a limited chance he will need to walk, then that Marine needs to wear as much protection as possible. Unfortunately, the Marine Corps forces a Marine to wear all of his PPE, restricting his mobility whereby he becomes a larger and slower target for the enemy. PPE does save lives; however, wearing too much PPE can also cost Marine lives.

Conclusion

Marines pride themselves on their expeditionary nature and ability to adapt to a changing environment. As an organization, the Marine Corps does not need to hinder this mentality, but rather encourage and foster it. Higher level commanders need to make tough decisions and realize that risks must be taken in war, and give subordinate commanders the autonomy to make the right decisions for their unit. In the meantime, when an estimate of a situation is conducted by a battalion commander which determines that only a certain level of PPE is required for an operation, allow the commander to make the decision. If general level officers refuse to allow subordinate commanders to make these decisions, then conceivably the Marine Corps will continue to give the initiative to the enemy.

2039 words

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